

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

I. Introduction

After amending the claims as set forth above, claims 1, 4-8 and 10 are now pending in this application. Claims 7-8 are withdrawn from consideration. Claim 10 has been amended. Support for the amendment may be found on page 6, lines 17 to 19 of the specification. No new matter was added.

II. The Rejection Should Be Withdrawn

Claims 1, 4-6 and 10 are rejected under § 102(b) as being anticipated by McClary. This rejection is respectfully traversed.

A. Element (d) Of Claim 1 Is Not Inherent In McClary

Applicants respectfully submit that McClary does not teach or suggest at least element (d) of claim 1. McClary is silent on the condition recited in element (d) of claim 1. Thus, McClary does not teach or suggest that the main dispersion peak temperature of loss tangent ($\tan \delta$) in the measurement of dynamic viscoelasticity at 110 Hz should be less than or equal to 147.0°C.

The Office Action states that the range recited in element (d) of claim 1 is inherent. Specifically, page 3 of the Office Action states that the main dispersion peak temperature of loss tangent ($\tan \delta$) in the measurement of dynamic viscoelasticity at 110 Hz of less than or equal to 147.0°C is an inherent property of polyester terephthalate. Applicants respectfully disagree.

Applicants submit that the main dispersion peak temperature of loss tangent ($\tan \delta$) in the measurement of dynamic viscoelasticity at 110 Hz of less than or equal to 147.0°C is not an inherent physical property of polyester terephthalate.

Applicants respectfully direct the examiner's attention to Table 1 on page 15 of the present specification. Table 1 shows that for comparative examples 1, 3 and 4 (columns 6, 8 and 9), the main dispersion peak temperature of loss tangent in the measurement of dynamic viscoelasticity at 110 Hz was greater than 147.0°C, even though polyethylene terephthalate at 90 mol % or higher repeating unit and an intrinsic viscosity of 0.85 dl/g or higher (see row 7 of Table I) was used to make the polyester fiber! Thus, the peak temperature in element (d) recited in claim 1 of the present application depends on how the fiber was processed, as explained in example 1 and comparative examples 1, 3 and 4 of the present application, rather than just being an inherent physical property of polyethylene terephthalate.

In order to establish anticipation by inherency, the PTO must establish that the alleged inherent result must necessarily occur in the prior art product or process. MPEP 2112; *In re King*, 231 USPQ 136 (Fed. Cir. 1986); *Ex Parte Levy*, 17 USPQ2d 1461, 1464 (BPAI 1990). As explained in the previous paragraph above, the main dispersion peak temperature of loss tangent in the measurement of dynamic viscoelasticity at 110 Hz of McClary is not necessarily less than or equal to 147.0°C for polyethylene terephthalate. The Office Action has not established that the above recited range in element (d) in claim 1 must necessarily occur in the fiber of McClary or that the process of McClary would necessarily result in a fiber having a property range recited in element (d) of claim 1. Thus, the range recited in element (d) of claim 1 is not inherent in the fiber of McClary.

B. The Fiber Of McClary Is Outside The Range In Element (d) Of Claim 1

As described in page 6, lines 11 to 20 of the present specification, the characteristic (d) of claim 1, i.e., $T\alpha$ (110 Hz) \leq 147.0°C, corresponds to the birefringence of an undrawn yarn of ≥ 0.075 .

In contrast, the birefringence of about 0.190 to 0.205 of McClary (column 12, lines 11-29) noted in the Office Action is that of a drawn yarn rather than that of an undrawn yarn as seen from, for example, column 10, lines 65-68 of McClary. The birefringence of an undrawn yarn of McClary corresponds to 0.009 to 0.070 as described in column 3, lines 14-20 and in element (d) of claim 1 of McClary.

Therefore, McClary does not anticipate claim 1 of the present application because it does not teach or suggest $T\alpha$ (110 Hz) $\leq 147.0^{\circ}\text{C}$ as recited in element (d) of claim 1 for the following reasons:

- 1) The birefringence of the undrawn yarn of McClary is less than 0.075 (i.e., it is 0.009 to 0.07);
- 2) As described in the present specification, $T\alpha$ (110 Hz) $\leq 147.0^{\circ}\text{C}$ corresponds to the birefringence of an undrawn yarn of greater than or equal to 0.075;
- 3) Thus, it can be presumed that McClary's $T\alpha$ (110 Hz) is greater than 147.0°C because the birefringence of the undrawn yarn of McClary is less than 0.075.

Thus, McClary does not anticipate claim 1 of the present application because it does not teach or suggest $T\alpha$ (110 Hz) which is less than or equal to 147.0°C ,

C. Unexpected Results

The fiber of claim 1 is also not obvious over McClary because there is no motivation to modify McClary to meet all the limitations of claim 1. Furthermore, even if a *prima facie* case of obviousness is established, it is rebutted by evidence of unexpected results of the claimed fiber.

As described on page 4, line 20 to page 5, line 4 of the specification, even when a base yarn having decreased strength is used from the viewpoint of working stability, it is not necessary to abandon the tenacity of finally required dipped cords, and a polyester fiber having a very high tenacity conversion efficiency in the drip treatment can be obtained. This is based on the present inventors' unexpected discovery that tenacity conversion efficiency in

the dip treatment can be maintained, when the fiber simultaneously meets the characteristics (c) and (d) of claim 1, i.e., monofilament linear density ≤ 5.0 dtex, and main dispersion peak temperature of loss tangent ($\tan \delta$) in the measurement of dynamic viscoelasticity at 110 Hz $\leq 147.0^\circ\text{C}$. These results are not taught or suggested by McClary.

D. Claim 10

Applicants also submit that McClary does not teach all elements of claim 10 as amended.

Claim 10 recites a birefringence of an undrawn yarn of ≥ 0.075 . In contrast, the birefringence of about 0.190 to 0.205 of McClary (column 12, lines 11-29) noted in the Office Action is that of a drawn yarn rather than that of an undrawn yarn as seen from, for example, column 10, lines 65-68 of McClary. The birefringence of an undrawn yarn of McClary corresponds to 0.009 to 0.070 as described in column 3, lines 14-20 and in element (d) of claim 1 of McClary. Thus, the birefringence of an undrawn yarn of McClary is outside the range recited in claim 10.

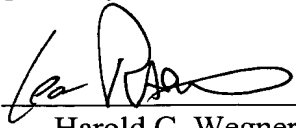
III. Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The

Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.